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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,065	10/10/2003	Kenneth W. Welch JR.	021603.0102PTUS	3063

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Gerald T. Welch, Esq.  
Patton Boggs, LLP  
Suite 3000  
2001 Ross Avenue  
Dallas, TX 75201

EXAMINER
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LESLIE, MICHAEL S

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/684,065

Applicant(s)

WELCH ET AL. 

Examiner

Michael Leslie

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 31-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 42-50 is/are rejected.
- 7) ☒ Claim(s) 15, 16, 45-47 and 49 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/19, 8/9, 9/21</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-30 and 42-50, drawn to A system for and method of generating electricity from wave motion, classified in class 60, subclass 398.
- II. Claims 31-41, drawn to A computing system for designing a buoyancy pump device, classified in class 703, subclass 1.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, functions, and effects.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, the search required for Group I is not required for Group II, and their recognized divergent subject matter restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Robert Hilton on January 6, 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-30 and 42-50. Affirmation of this election must be made by applicant in replying to this Office action. Claims 31-41 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Art Unit: 3745

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Claim Objections***

Claims 15, 16, 45-47, and 49 are objected to because of the following informalities: Claim 15, Line 1, "claim 13" should be --claim 11--; Claim 16, Line 1, "claim 13" should be --claim 11--; Claim 45, Line 1, "claim 41" should be --claim 42--; Claim 46, Line 1, "claim 41" should be --claim 42--; Claim 47, Line 1, "claim 41" should be --claim 42--; Claim 49, Line 1, "claim 41" should be --claim 42--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites that the pump is "composed of a plurality of pilings aligned by at least one buoyancy chamber ring", it is unclear how a single buoyancy chamber ring can be used

Art Unit: 3745

when the specification discloses that the buoyancy chamber is formed of a plurality of buoyancy chamber rings and a plurality of pilings (pg. 63, lines 3-18).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Vetterick et al. (6388342).

Vetterick et al. discloses a method for generating electricity including converting wave motion into mechanical power, driving a fluid matter as a function of the mechanical power to a reservoir, flowing the fluid matter from the reservoir, and converting at least a portion of a kinetic energy of the flowing fluid matter into electrical energy. Wherein converting wave motion into mechanical power includes moving a member in a first direction and a second direction in response to the wave motion moving the member in the first and second directions, respectively, and driving the fluid matter further includes intaking the fluid matter in response to the wave motion moving the member in the first direction, and exhausting the fluid matter in response to the wave motion moving the member in the second direction and forcing fluid matter to an increased elevation to the reservoir. The method further includes storing the fluid matter in the reservoir, increasing pressure of the fluid matter in the reservoir, and applying the electrical energy onto a power grid. Flowing the fluid matter includes gravitating the fluid matter for

Art Unit: 3745

converting the kinetic energy of the flowing fluid matter into electrical energy, utilizing pressure to flow the fluid matter, and converting the flowing fluid matter includes driving a turbine utilizing the flowing fluid matter.

Claims 11, 13-19, 21, 22, 25, 28-30, 42, 43, 45, 46, 49, and 50 are rejected under 35 U.S.C. 102(a) as being anticipated by Vetterick et al. (6388342).

Vetterick et al. discloses a system for generating electricity having a plurality of pumps (12) located in a body of water (68), arranged in a grid, including input and output ports, an outlet line coupled to the pump output port, a reservoir (72) including an input feed port (74) and an output feed port (76), and a turbine (30). Wherein the reservoir is on land or over the water, and the pump is a buoyancy pump. The system further includes power lines connected to the turbine, and is scalable.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 23, 24, 26, 44, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vetterick et al. in view of Boyd (6647716).

Vetterick et al. discloses a system for generating electricity as described above in claims 11, 22, 42, and 43, respectively, but does not specifically teach that the pump is portable, a

Art Unit: 3745

specific layout of the pump grid, or an automatically adjustable element. Boyd discloses a system for generating electricity from wave motion using a buoyancy pump that is portable, has the pumps arranged in a grid positionally offset by a row along consecutive columns, and an automatically adjustable element for altering operation of the pump (Fig. 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Vetterick et al. by having the pumps be portable, having the pumps arranged in a grid positionally offset by a row along consecutive columns, and having an automatically adjustable element for altering operation of the pump as taught by Boyd for the purpose of being able to optimize operation of the system based on wave activity.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vetterick et al.

Vetterick et al. disclose a system for generating electricity as described above in claim 19, but does not specifically teach that the reservoir includes a fish hatchery.

Since applicant has not disclosed that having the reservoir serve as a fish hatchery solves any stated problem or is for any particular purpose above the fact that it is a possible secondary use for the reservoir and it appears that the reservoir of Vetterick et al. would perform equally well with the secondary function of the reservoir being a fish hatchery as claimed by applicant, it would have been an obvious matter of design choice to modify the reservoir of Vetterick et al. by utilizing the reservoir as a fish hatchery as claimed for the purpose of hatching fish eggs.

Art Unit: 3745

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Leslie whose telephone number is (571) 272-4819. The examiner can normally be reached on M-F 8:00am - 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML

January 12, 2005

  
**Michael Leslie**  
**Patent Examiner**  
**AU 3745**

  
**EDWARD K. LOOK**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**

1/16/05